

WHAT IS CLAIMED IS:

1. A stent comprising:

a first loop containing section arranged in a circumferential direction and defining loops therein occurring at a first frequency;

a second loop containing section arranged in the circumferential direction and defining loops therein occurring at the first frequency;

a third loop containing section disposed in a generally circumferential space between the first loop containing section and the second loop containing section and coupling the first loop containing section to the second loop containing section for defining cells therebetween, the third loop containing section defining loops therein occurring at a second frequency that is greater than the first frequency.

2. The stent according to claim 1, wherein the first and second loop containing sections are each part of a continuous circumferential member having a plurality of the first and second loop containing sections respectively and the third loop containing section is also part a continuous loop having a plurality of the third loop containing sections coupled to first and second loop containing sections for defining the cells.

3. The stent according to claim 1, wherein the first and second loop containing sections are each part of a continuous circumferential member having a plurality of the first and second loop containing sections respectively and wherein a plurality of the third loop containing sections each having one end connected to one of the first loop containing sections and another end connected to one of the second loop containing sections are provided.

4. The stent according to claim 1, wherein the first loop containing section and the second loop containing section are 180 degrees out of phase with one another.

5. The stent according to claim 2, wherein the first loop containing section and the second loop containing section are 180 degrees out of phase with one another.

6. The stent according to claim 3, wherein the first loop containing section and the second loop containing section are 180 degrees out of phase with one another.

7. The stent according to claim 6, wherein one end of each of the third loop containing sections is connected to a first loop of the first loop containing section, and another end of each of the flexible compensating members is connected to a second loop of the second loop containing section, said second loop being circumferentially offset with respect to the first loop.

8. The stent according to claim 7, wherein the third loop containing section has a width than is smaller than a width of the first loop containing section and of the second loop containing section.

9. A stent comprising:

first meander patterns having axes extending in a first direction;

second meander patterns having axes extending in a second direction that is different from the first direction;

wherein the second meander patterns are intertwined with the first meander patterns; and

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wherein the second meander patterns have loop portions with at least one loop, each loop portion having one end connected to one of first meander patterns and another end connected to a neighboring one of the first meander patterns such that said one end of said each loop portion is circumferentially offset with respect to said another end of said each loop portion.

10. The stent according to claim 8, wherein each loop portion has at least two loops.

11. The stent according to claim 9, wherein the loop portions of the second meander patterns have a smaller width than the first meander patterns.

12. A stent formed of a tube having a patterned shape, the patterned shape in the expanded and deployed state comprising:

a) first meander patterns, having axes extending in a first direction;

b) second meander patterns having axes extending in a second direction different from said first direction, wherein said second meander patterns are intertwined with said first meander patterns to form a generally uniform distributed structure;

c) wherein said first meander patterns are connected to said second meander patterns so as to leave a portion of said second meander patterns between each first meander pattern;

d) wherein said second meander patterns are connected to said first meander patterns so as to leave loops of said first meander patterns between each pair of second meander patterns; and

e) wherein said second meander patterns have loop portions with at least one loop, each loop portion having one end

connected to one of first meander patterns and another end connected to a neighboring one of the first meander patterns such that said one end of said each loop portion is circumferentially offset with respect to said another end of said each loop portion.

13. A stent according to claim 12 wherein said first meander patterns have loops, and wherein said second meander patterns are connected to said first meander patterns so as to leave one loops of said first meander patterns between each pair of second meander patterns.

14. A stent according to any preceding claim, wherein the first meander patterns comprise even first meander patterns and odd first meander patterns and wherein the odd first meander patterns are 180° out of phase with the even first meander patterns and occur between every two even first meander patterns.

15. A stent comprising:

- a. at least odd and even alternating serpentine sections, each having first areas of inflection, wherein said odd serpentine section is out of phase from said even serpentine section such that first areas of inflection on said odd serpentine section are adjacent first areas of inflection on said even serpentine section; and
- b. a plurality of flexible connectors, one located between each first area of inflection of one of said odd and even alternating serpentine sections and a first area of inflection of the other of said odd even alternating serpentine sections which is circumferentially offset from said first area of inflection of one of said odd and even alternating serpentine sections, wherein said

flexible connector has at least two portions connected by at least one second area of inflection, and wherein said first and second areas of inflection define first and second angles whose bisecting lines are substantially parallel to one another.

16. A stent according to claim 15, wherein said flexible connectors are part of a continuous additional serpentine section.

17. A stent according to claim 15, wherein said flexible connectors are separate elements.